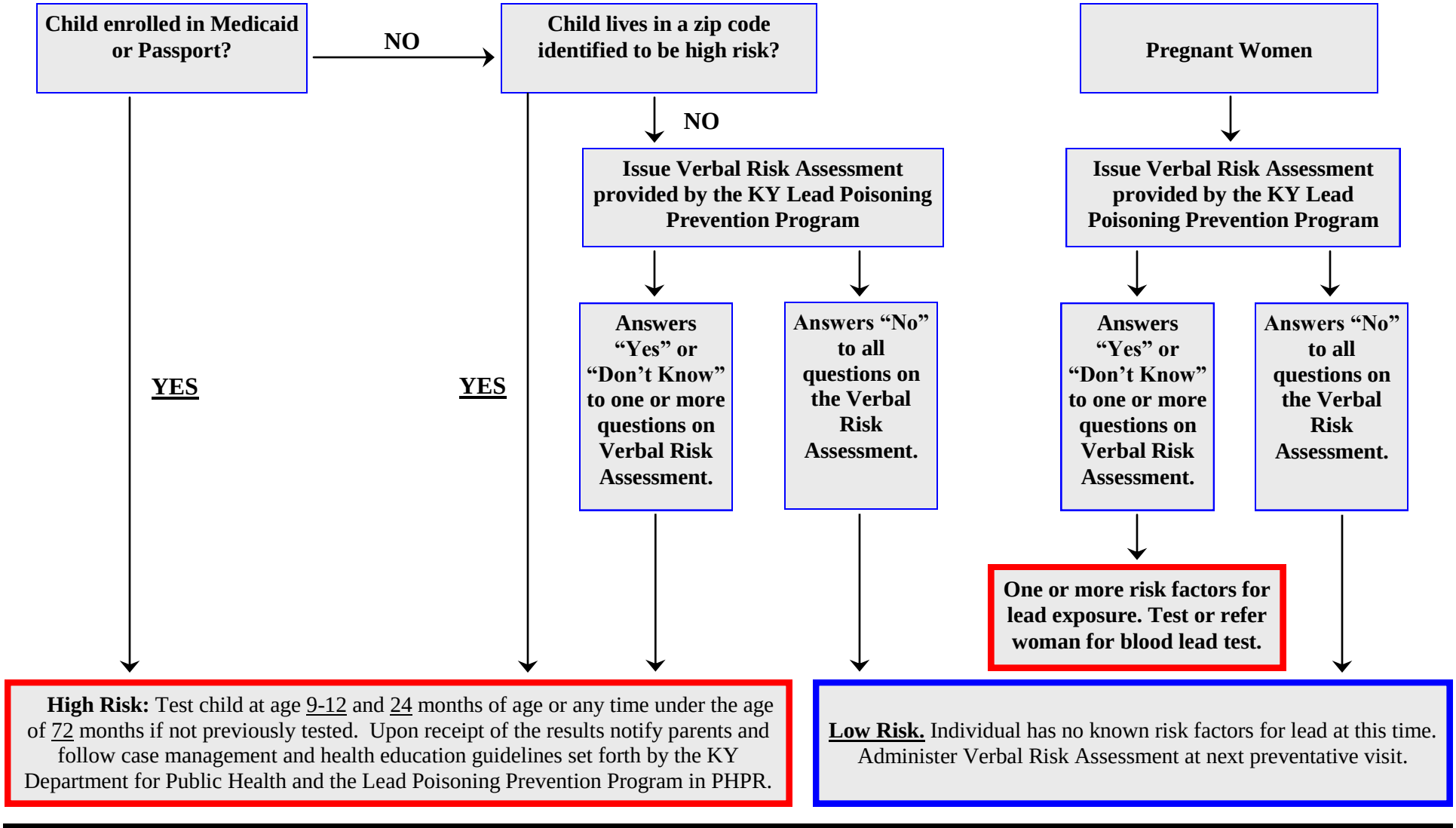
KY CLPPP Targeted Screening Guide



NOTE: According to the Centers for Medicare & Medicaid Services' Early and Periodic Screening, Diagnosis and Treatment (EPSDT) guidelines, all EPSDT examinations must include a blood lead laboratory test for children at 12 and 24 months of age and anytime under the age of 72 months if not previously tested. See PHPR Lead Classification Chart for protocols on case management, health education and medical referrals.

LEAD CLASSIFICATION CHART

	FINDING/ CONDITION/ NEED	ASSESSMENT	INTERVENTIONS	FOLLOW-UP
Blood Lead	**Class I** < 10 µg/dL	Not considered lead poisoning (*No amount of lead in the body is normal. A **Class I** blood lead level can cause loss of IQ points and learning disabilities. It is very important that education on ways to prevent lead poisoning begin at this level)*	• Continue to review risk assessment questions at each preventive health visit up to 72 months with routine blood lead testing at 9–12 and 24 months on all Medicaid recipients and children who live in a targeted screening area. • Parent education pamphlets • Refer for LHD WIC services • Contact State CLPPP Case Manager (CLPPP CM) if you have questions	• Annual blood lead levels once a positive risk factor is identified. • Retest at next periodicity visit if risk factor changes • Medicaid recipients or children who reside in a targeted screening area: 1. Routine blood lead level obtained at 9–12 and 24 months of age. 2. Blood lead level obtained on all children 25–72 months of age who have never been screened.
	Class II 10–14 µg/dL	Level of concern 1st specimen at this level	• Parent education pamphlets • LHD report sent to CLPPP CM, contact if any questions; send report form if 2nd level in the 12 weeks is >10µg/dL • Refer for WIC services <u>Home Visits:</u> • If 1st specimen at this level, nurse may make home visit for visual investigation to identify risks • *If 2nd specimen remains at this level, nurse and/or local environmentalist ****must make a home visit*** for visual investigation within 2 weeks if BLL remains in this range	• A blood lead level will need to be repeated within 12 weeks of the initial, if still in this range repeat every 12 weeks until blood lead level is less than 10 µg/dl • Establish a tracking system that assures retesting • Case management

LEAD CLASSIFICATION CHART

FINDING/ CONDITION/ NEED		ASSESSMENT	INTERVENTIONS	FOLLOW-UP
	Class III 15–44 µg/dL	Lead Poisoning First capillary specimen at this level (not confirmed lead poisoning) A venous specimen or 2nd capillary specimen at this level (confirmed lead poisoning)	• Parent education pamphlets • Contact state CLPPP case manager **Once Lead Poisoning is Confirmed:** • Refer to WIC • Refer for Medical Nutrition Therapy. • Refer to a primary care provider (PCP) for medical evaluation. • Initial home visit by nurse within 1 week • Visual investigation to be made within 2 weeks of LHD receiving confirmed EBLL results • Refer to a *Certified Risk Assessor to perform a lead risk assessment within 2 weeks of LHD receiving confirmed EBLL results. • Lead Risk Assessment to be done within 30 days of receiving referral from LHD, with final reports sent to CLPPP CM, LHD CM, parents and homeowners • Mail or fax monthly report to CLPPP CM **Contact KY CLPPP if your HD does not have a Certified Risk Assessor* **For levels ≥30µg/dL, refer patient to a PCP, PCP then to contact or refer to Lead Specialist, if if *Lead Specialist has not been contacted within one week, please contact CLPPP.**	Submit second specimen within one week (if capillary) • Repeat blood lead levels at 1–2 month intervals until: a) Blood lead level is less than 10µg/dl for 6 months b) Lead Hazards have been abated or addressed. • Establish a tracking system that assures retesting • Case management

LEAD CLASSIFICATION CHART

	FINDING/ CONDITION/NEED	ASSESSMENT	INTERVENTIONS	FOLLOW-UP
lood Lead	**Class IV** 45–69 µg/dL A venous specimen is needed to confirm a diagnosis of lead poisoning at this level.	Lead Poisoning Same as Class III	• Same as Class III, except medical evaluation should completed with in 48 hours. • **Refer patient to a PCP, PCP then to contact or refer patient to*Lead Specialist, if *Lead Specialist has not been contacted within 24 hours of referral, please contact CLPPP.**	• Submit the second specimen as soon as possible but no later than 48 hours (if capillary) • During and post chelation, retest monthly until: a) Blood lead level is less than 10 µg/dL for 6 months b) Lead Hazards have been abated or addressed. c) As ordered by the physician. • Establish a tracking system that assures retesting • Case Management
	Class V ≥70µg/dL A venous specimen is needed to confirm a diagnosis of lead poisoning at this level.	**Medical Emergency** Lead Poisoning Same as Class III	• Same as Class III, except medical evaluation should completed with in 24 hours. • **Refer patient to a PCP, PCP then to contact or refer patient to*Lead Specialist, if *Lead Specialist has not been contacted within 24 hours of referral, please contact CLPPP.**	Submit the second specimen as soon as possible but no later than 24 hours (if capillary) • During and post chelation, retest monthly until: a) Blood lead level is less than 10µg/dL for 6 months b) Lead Hazards have been abated or addressed. c) As ordered by the physician. • Establish a tracking system that assures retesting • Case management

*** Contact KY CLPPP for Lead Specialist contact information**
502-564-2154 X3527

KY CHILDHOOD LEAD POISONING PREVENTION PROGRAM
LEAD POISONING PREVENTION AND MANAGEMENT

Environmental lead exposure continues to cause harm, particularly to young children and pregnant women. This is a guidance on the provision of lead screening and follow-up services for children 9–72 months of age. Lead screening and follow-up guidelines for pregnant women are included in the Prenatal Section.

Case management of children and pregnant women with elevated blood lead levels involves the coordination, provision and oversight of services required to reduce levels below a level of concern and is provided through the local health department. A hallmark of effective case management is ongoing communication with the caregivers and other service providers, and a cooperative approach to solving any problems that may arise during efforts to decrease a patient's elevated blood lead level, and eliminate lead hazards in the patient's environment.

Case management is much more than a simple referral to other service providers. There are 8 components, which should be under the purview of a registered nurse:

- Client identification and outreach
- Individual assessment and diagnosis
- Service planning and resource identification
- The linking of clients to needed services
- Service implementation and coordination
- The monitoring of service delivery
- Advocacy
- Evaluation*

Note: If blood lead specimens are drawn at PCP's, please collaborate with the LHD when receiving specimen results. Children and pregnant women with elevated blood lead levels become "**health department patients**" when their cases are brought to the attention of local health department staff, even if they are or have been receiving direct clinical services elsewhere. They will remain a health department patient until patient case closure.

Case closure is defined according to the initial elevated level of classification (See Lead Classification Chart):
Classes II – Level is less than 10 micrograms per deciliter.
Classes III, IV, & V – Level is less than 10 micrograms per deciliter for **at least 6 months**; environmental hazards have been addressed; and there are no new environmental hazards.

For prenatal lead exposure, case closure ends for the pregnant woman at delivery of the infant. If the BLL is >25ug/dL, follow-up will be with the patients PCP. The newborn will need to be tested at delivery. A cord blood sample is to be used for the blood lead specimen at the time of delivery. Protocols for case management will be initiated for newborns with BLL's ≥10ug/dL.

* "*Managing Elevated Blood Lead Levels Among Young Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention" – CDC, 2002*

KY CHILDHOOD LEAD POISONING PREVENTION PROGRAM

1. VERBAL RISK ASSESSMENT FOR LEAD POISONING

Children
Review each of these questions at every preventive service for all children ages 9–72 months. The questions are included on the Health Risk Assessments (ACH 90 and ACH 91).
Pregnant Women
Review each of these questions at the positive pregnancy test visit or initial prenatal visit.

1. Does the patient live in or visit a building built before 1978 with peeling/chipping paint or undergone recent or ongoing remodeling?

2. Does the patient or or any other members of the household (child's playmate/ brother/sister/ patient's spouse) have a history of elevated blood lead levels or who has had lead poisoning?

3. Does the patient or someone in the household work in an occupation known or suspected to involve lead? Common industries using lead include but are not limited to:

auto mechanics/bodywork	migrant farm work	furniture refinishing
plastics manufacturing	plumbing	construction
printing	firearms	metal work/welding
ammunitions	batteries	etc.

4. Does the patient use any folk remedies that may contain lead or use pottery or ceramic ware for cooking, eating, or drinking or participate in hobbies that may involve lead such as ceramic pottery, jewelry making, gardening or stained glass? ?

Document in the medical record at every visit that the assessment was done, any positive response(s) and action taken:

- If the verbal risk assessment is negative at each visit, a blood lead level test should be routinely done for all Medicaid children and children who reside in a **targeted zip code area at 9–12 months of age and at 24 months of age.
- A "Yes" or "don't know" answer to any question on the risk assessment will warrant a blood test for lead poisoning at that time, regardless of the patient's payer source or zip code area.
- Any child with a positive risk factor should be tested at least annually, until 72 months of age, as long as any risk factor exists.

Document in the medical record at every visit that the assessment was done, any positive response(s) and action taken:

2. BLOOD LEAD TESTING

All children and pregnant women regardless of payer source must have a blood test if they have a "**Yes**" or "**don't know**" answer to any question on the **Verbal Risk Assessment**. The question is, "Are Your Patient's at Risk?" All children who receive Medicaid benefits or reside in a **targeted zip code area must have a blood lead test at 9–12 months of age and again at 24 months of age.

All children who receive Medicaid benefits or reside in a targeted zip code area must be provided a blood lead test when they present to the health department between 25 and 72 months of age and have not previously received a blood lead test.

For Medicaid enrolled pregnant women, Medicaid will pay for a blood lead screening, all others will need to pay per sliding fee scale or private insurance.

3. COMPLETION OF LABORATORY SUBMISSION FORMS

A. SCREENING

This should be checked for the:

- initial capillary sample; first venous sample
- venous samples should <u>always</u> be taken on **pregnant** women
- re-screenings of children with levels equal to or greater than 10ug/dL
- any screening test being repeated due to clot, insufficient quantity, or any other reason the sample could not be analyzed.

B. CONFIRMATORY

This should be checked for:

- the *second capillary* sample when the first capillary sample was equal to or greater than 15 micrograms per deciliter
- venous samples submitted as confirmatory samples after a first capillary sample was equal to or greater than 15 micrograms per deciliter and
- confirmatory tests being repeated due to clot, insufficient quantity, or any other reason the sample could not be analyzed.

C. MEDICAL FOLLOW-UP

This should be checked for:

- follow-up tests of ALL children who have been previously confirmed to be lead poisoned and
- medical follow-up tests being repeated due to clot, insufficient quantity, or any other reason the sample could not be analyzed.

NOTE: If a venipuncture is completed as an initial screening and the results are greater than or equal to 15 micrograms per deciliter, this is to be considered a <u>confirmed</u> case of lead poisoning. Follow the recommended actions for levels greater than or equal to 15ug/dL as indicated in the "Guidelines for Blood Lead Levels and Follow-Up."

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KY CHILDHOOD LEAD POISONING PREVENTION PROGRAM (CLPPP)
LEAD MANAGEMENT HOME VISITS

An initial home visit by a nurse is required for all children receiving services in a health department clinic with a second blood lead level remaining at 10–14 micrograms per deciliter or a confirmed blood lead level of 15 micrograms per deciliter or above and for pregnant women with a BLL of 10ug/dL or greater. An environmentalist must also visit the child's home, with the nurse if possible, to conduct an *environmental visual investigation to identify sources of lead exposure. *Follow-up home visits may additionally be made, at the discretion of the nurse or environmentalist, to monitor the blood lead status of the child and/or to evaluate the home.

Environmental Risk Assessments:

- **The health department nurse is responsible for referring all children and pregnant women receiving services in a health department clinic with a confirmed blood lead level of 15 micrograms per deciliter or above to a *person certified* to perform a risk assessment.**
- A private provider or the parent or guardian may refer children receiving services in the private sector. If child is referred to the health department and no environmental risk assessment has been done, the health department nurse is responsible for referring those children to a ***person certified*** to perform a risk assessment.

Venous specimens are a confirmed specimen; there is no need for additional confirmation.

The home visit by the nurse and the environmental visual investigation should occur according to the timeframe specified below.
*See Initial Home Visit/ Follow Up Home Visit/Onsite Visual Investigation Forms in the Forms Section.

TIMEFRAME	ASSESSMENT	INTERVENTIONS/FOLLOW-UP
<u>Initial Home Visit:</u> • **70 µg/dL and above within 24 hours.** • **45–69 µg/dl within 48 hours** • **15–44 µg/dl within 1 week** • **10-14 µg/dl within 2 weeks** • **See additional Guidelines in Prenatal Section of the PHPR** **The initial home visit (home visit other than evaluation and management visit) usually lasts 31 or more minutes.**	Family's awareness of the child being lead poisoned and level of understanding. Who is providing primary and acute health care? Child's physical status, including behavior problems/changes, nutritional status and specific habits such as placing fingers in mouth or eating dirt or paint chips. Home environment: determine whether dwelling was built prior to *1978*, the general condition of the house/apartment and the level of housekeeping/cleanliness.	Inform family of the child's lead status, what lead poisoning is, the effect of lead, and the importance of monitoring blood lead levels at least every 1–2 months or as indicated by physician. Patient education and counseling to be provided for the pregnant women. Assist family in scheduling an appointment for a medical evaluation for lead poisoning and an appointment for preventive health care if indicated. Provide health education and referrals, as indicated. Stress importance of diet high in vitamin C, iron, calcium and low in fat, and the importance of hand washing and cleaning frequently. Explain common sources of lead and ways to immediately reduce exposure such as cleaning with detergent, covering chipping paint with tape or plastic, and restricting patient's from being/ playing in a hazardous area. If an environmentalist is initially unavailable for a visit, tell the family that one should soon come to assess the house for additional potential sources of lead. (A person certified to perform lead risk assessments must make visits in homes with patients having blood lead levels of equal to or greater than 15 micrograms per deciliter)

LEAD MANAGEMENT HOME VISITS

(Continued)

TIMEFRAME	ASSESSMENT	INTERVENTIONS/FOLLOW-UP
Follow-Up Visit (indicated for children not returning to clinic for blood lead monitoring, and children with blood lead levels which remain high, increase or do not decline over time) The follow-up visit (other than evaluation and management visit) usually lasts 16–30 minutes.	Family's understanding of lead poisoning. Whether appointments are being kept. Patient's physical status. Patients blood lead level status. Home environment: determine whether temporary measures are continuing. Determine whether permanent measures have occurred/are planned. Determine if interim controls may help lower patients lead level.	Reinforce previous health education. Stress importance of monitoring blood lead levels every 1–2 months or as ordered by the physician for confirmed cases and every 3 months for 10–14 micrograms per deciliter. Provide health education and referral, if indicated. Collect blood and/or schedule a clinic appointment, if indicated. (Coded "Screening" or "Confirmatory" sample. "Medical Follow-up" if child has been confirmed.) Reinforce previous recommendations. Provide education, as indicated. Stress importance of workers using safety precautions and appropriate clean-up procedures during abatement. Encourage pregnant women and children to be kept away from work areas. While extensive work is being done, it is preferable to move the family out of the home.

Resources: (State CLPPP 502-564-2154)
"Lead Poisoning: Are Your Children at Risk?"
"Prevent Lead Poisoning, Eat Healthy"
"Lead Poisoning and Your Children"
"Protect Your Children from Lead in Your Home"
"Fight Lead Poisoning with a Healthy Diet"
"Lead Paint Safety"
"Preventing Lead Exposure in Young Children"
www.epa.gov/lead
www.cdc.gov/niosh
www.putthelidonlead.org

Manuals:

1. *Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials*. (CDC, 1997)
2. *Managing Elevated Blood Lead Levels Among Young Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention*. (CDC, 2002)

****Appendix**
Targeted Zip Codes

Adair		**Breckinridge**		**Edmonson**		**Graves**		**Henry**
42715		40170		42275		42040		40007
42742				42285		42061		40058
42761		**Calloway**						
		42076		**Elliott**		**Grayson**		**Hopkins**
Allen				41171		42762		42408
42153		**Campbell**						42410
		41071		**Estill**		**Green**		
Ballard		41073		40336		42743		**Jackson**
42060		41074		40472				40447
		41085				**Greenup**		40486
Barren				**Fayette**		41174		
42160		**Carlisle**		40508				**Jefferson**
		42021				**Hardin**		40202
Bath		42023		**Fleming**		40155		40203
40374				41049		40177		40204
		Carter						40205
Bell		41146		**Floyd**		**Harlan**		40206
40845				41605		40801		40208
40902		**Casey**		41606		40807		40209
40958		42528		41607		40810		40210
40977		42539		41612		40815		40211
40988				41615		40819		40212
		Christian		41619		40820		40213
Bourbon		42266		41630		40823		40215
40348		42254		41635		40828		40217
40361				41636		40830		
		Clay		41640		40831		**Johnson**
Boyd		40914		41649		40843		41216
41101		40941		41650		40854		41219
		40972		41651		40855		41222
Bracken		40983		41653		40863		41228
41002				41660		40870		41238
41004		**Clinton**		41666		40873		41240
		42602		41669				41254
Breathitt						**Hart**		41255
41317		**Crittenden**		**Fulton**		42722		41257
41339		42064		42041		42729		41260
41385				42050		42749		41263
		Cumberland						41265
		42759		**Garrard**		**Hickman**		41268
Kenton				40461		42031		41274

41011		**Lee**		**Magoffin**		**Muhlenberg**		**Pike**
41014		41311		41426		42374		41514
41015		41397		41464		42321		41524
41016				41465		42332		41543
		Letcher		41632		42339		41546
Knott		40826						41549
41740		40862		**Martin**		**Ohio**		41553
41822		41537		41203		42333		41555
41843		41819		41224		42338		41563
41844		41825		41250		42343		41564
41759		41826		41262		42369		41567
41772		41833		41267				41569
41817		41835				**Owen**		
41834		41855		**Mason**		40355		**Todd**
41839		41810		41055				42204
41859		41840		41056		**Owsley**		
		41845				41314		**Warren**
Knox		41849		**Meade**		41364		42170
40734				40104		41386		
40771		**Lewis**		40176				**Wayne**
40903		41135				**Pulaski**		42633
40906		41170		**Menifee**		42501		42632
40935		41179		40322		42544		
40953				40346		42553		**Webster**
40982		**Lincoln**		40387				42450
40995		40448				**Wayne**		42463
40997				**Mercer**		42633		42403
		Livingston		40310		42632		
Lawrence		42047						**Whitley**
41124				**Metcalf**		**Perry**		40759
41159		**Logan**		42129		41367		40763
41230		42265		42154		41701		40769
						41712		
Leslie		**McCreary**		**Monroe**		41723		**Wolfe**
40827		42647		42167		41778		41301
40858		42653		42157		41735		41332
40874		42638		42140		41751		41365
41714				**Morgan**		41773		
41730		**McLean**		41408				
41762		42371		41421		**Robertson**		
41775				41425		41064		
41776		**Marion**						
		40009		**Nelson**		**Rowan**		
		40328		40008		40313		